

The State of the Bay Area Economy

Robert Fairlie - University of California, Santa Cruz
5/6/2013

Executive Summary

This report examines economic conditions in the San Francisco Bay Area over the past few years and explores projections for the next few years. Because of their importance as barometers of the local economy and in contributing to local tax revenues, the focus of the study is on conditions in the labor, housing, business, exports, consumer, and tourism markets.

The United States and the Bay Area experienced an extremely severe recession starting in December 2007. Although the official end date of the "Great Recession" was June 2009 the economy has not fully rebounded to pre-recessionary levels. Recently, however, announcements of employment growth, declining unemployment rates, and business investment have supported the view that the U.S. economy is expanding. The latest government estimates indicate that GDP is indeed growing.

A detailed analysis of economic conditions in the San Francisco Bay Area over the past few years clearly indicates that the local economy is recovering from the recession and growing. Recent trends indicate substantial improvement in the local economy and all forecasts for California project improvements over the next few years.

The main findings from the analysis are:

- The labor market in the Bay Area is improving rapidly. The unemployment rate has dropped substantially over the past year, employment is growing strongly, and wage rates are increasing.
- The labor market is even stronger in Santa Clara County. Santa Clara County has the highest average wage rate of any major county in the United States.
- Gross domestic product (GDP) and personal income in the Bay Area are growing and are projected to continue growing over the next few years. GDP in San Jose-Santa Clara-Sunnyvale MSA grew by a remarkable 13.2 percent in 2011 and another 7.6 percent in 2012.
- Although the number of employer businesses declined in the Great Recession in the Bay Area, the number increased in 2011. The growth rate in Santa Clara County in 2011 was in the range of pre-recessionary levels.
- The Bay Area is an expensive place to live. House prices and rents in the Bay Area are some of the highest in the country. Recent trends in prices, rents, trends in building permits and forecasts for housing prices suggest that the housing is rebounding from the Great Recession.

- The housing market in the San Jose-Sunnyvale-Santa Clara MSA is the most expensive in the nation. House prices have risen considerably in the past couple of years.
- Trends in airport activity suggest that tourist activity is strong and recovering from the recession.
- Consistent with improvements in the local economy, total taxable sales grew rapidly in the past year and is forecasted to continue to grow over the next few years.
- Recent economic growth in the Bay Area has created pre-recessionary inflationary pressures. The most recent CPI for the Bay Area is 2.4 percent.

Introduction

An analysis of the San Francisco Bay Area economy is important for understanding its health and trajectory. Conditions in the labor, housing, business, consumer, and tourism markets have major implications for local tax revenues. They directly or indirectly affect property taxes, business taxes, local sales taxes and hotel taxes. Furthermore, conditions in these markets, especially in housing, directly affect the cost of living for residents of the Bay Area and its surrounding areas. I examine trends in the past few years and the most current data available on several aspects of the San Francisco Bay Area regional economy. These trends and forecasts for the state of California are used for projecting local economic conditions over the next few years.

Any examination of current trends in the local economy must be placed in the broader context of the extremely severe recession recently experienced in the United States. The official dating of the U.S. recession was from December 2007 to June 2009.¹ At 18 months, it was the longest contraction period since the Great Depression. During this period the labor market experienced its deepest downturn in the postwar era. The national unemployment rate rose 5 percentage points in only a year and a half, reaching a peak of 10 percent in October 2009.² Because of these trends the recent recession was popularly dubbed the "Great Recession."

More recently, however, announcements of employment growth, declining unemployment rates, and business investment have supported the view that the U.S. economy is expanding. The latest estimates of national economic growth continue to show improving conditions since the recession: real gross domestic product (GDP) grew at an annualized rate of 2.5 in the first quarter of 2013.³ The unemployment rate has dropped from its peak of 10 percent in October 2009 to 7.6 percent in March 2013. The U.S. economy is clearly improving. With this broader overview of national economic conditions in mind, recent trends in conditions in the Bay Area regional economy are now examined. When available, estimates are also reported for Santa Clara County.

Labor Market Conditions

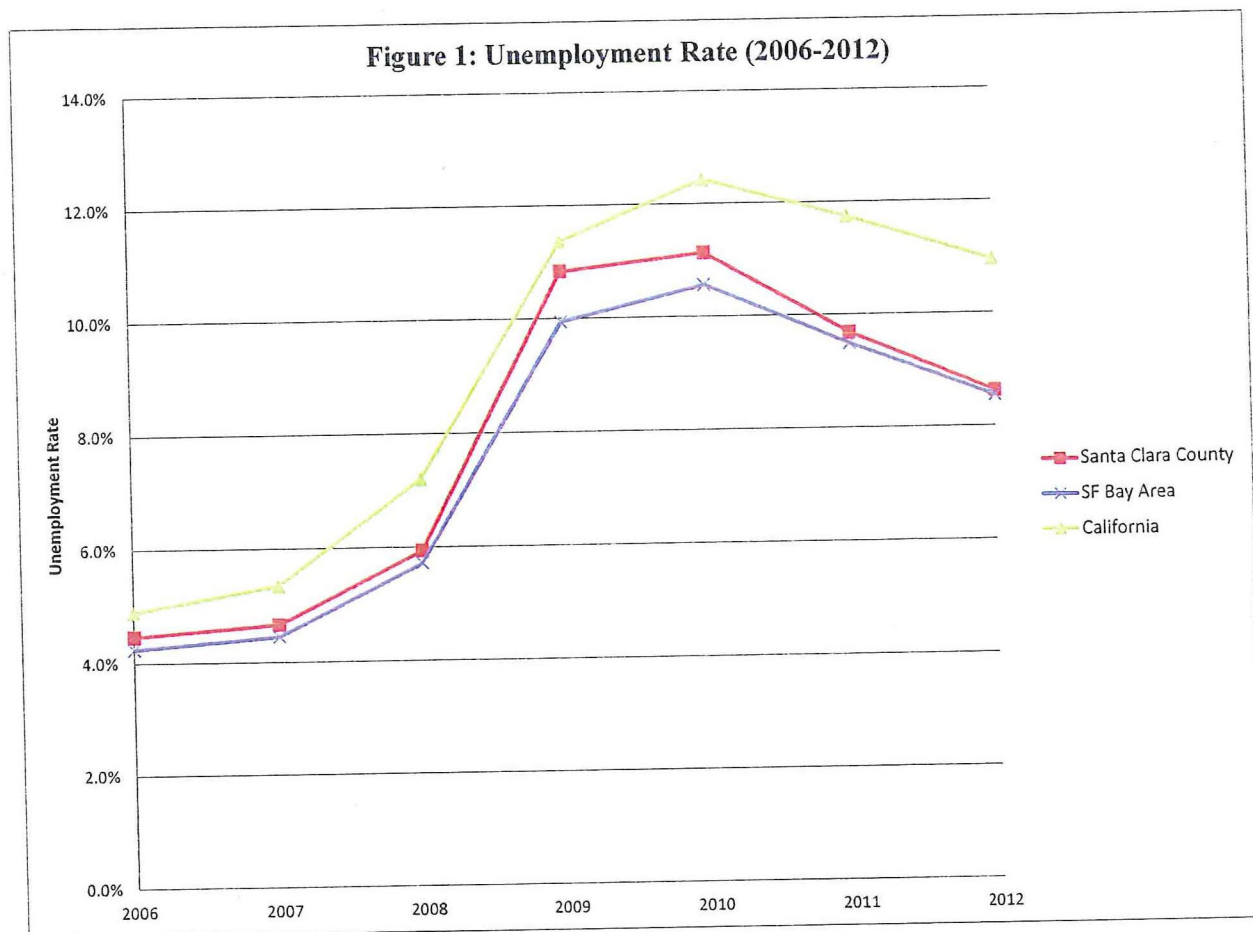
Conditions in the labor market are one of the most important barometers of local economic conditions. The labor market has a major effect on personal income, which in turn affects consumer demand and tax revenues. Two of the most common measures of local labor market conditions are the unemployment rate and the employment growth rate. I examine these measures for the San Francisco Bay Area, Santa Clara County and California as a whole. Figure 1 displays unemployment rates from 2006 to 2012.⁴ Unemployment rates in the Bay Area followed the national pattern through the Great Recession. Unemployment rose very rapidly from 2007 to 2010, reaching a peak of 10.6 percent in 2010. The unemployment rate, however, changed course and dropped over a full percentage point to 9.5 percent in 2011 and two full percentage points to 7.6 percent in March 2013.

¹ See National Bureau of Economic Research (2013), <http://www.nber.org/cycles/cyclesmain.html>.

² See U.S. Bureau of Labor Statistics (2013), <http://www.bls.gov/cps/>.

³ See U.S. Bureau of Economic Analysis (2013), <http://www.bea.gov/>.

⁴ Estimates are from the U.S. Bureau of Labor Statistics (2013), <http://www.bls.gov/lau/>.

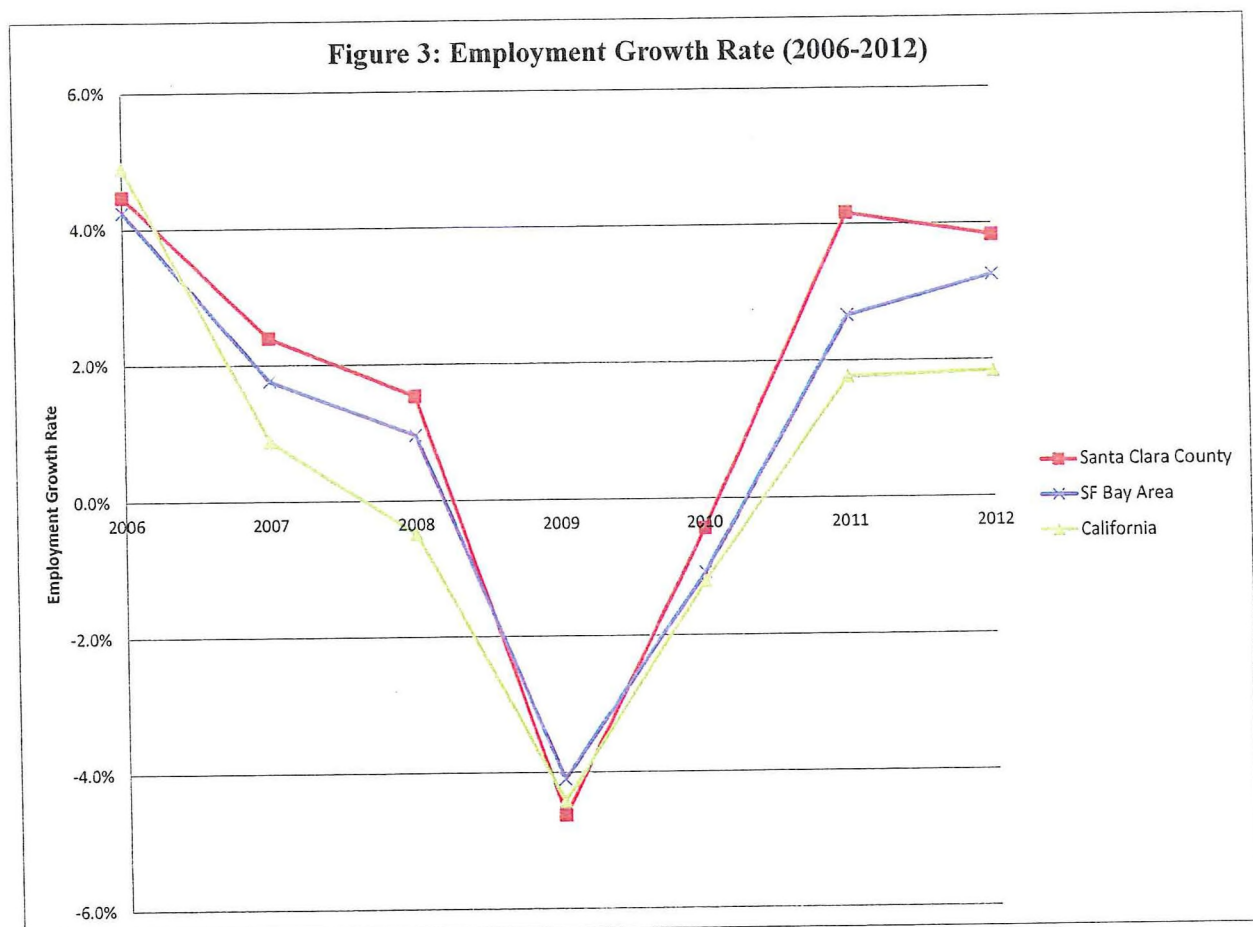


The unemployment rate in Santa Clara County followed the same trajectory over time. It rose in the recession, but dropped to 8.6 percent in 2012. Another interesting pattern is that unemployment rates in the Bay Area and Santa Clara County remained lower than in California throughout the recession and more recently. In fact, labor market conditions improved even more in the Bay Area and Santa Clara County than in California.

Focusing on recent monthly trends in unemployment, the unemployment rate shows even more improvement in the Bay Area labor market. Figure 2 displays the unemployment rate over the past 14 months for the Bay Area, Santa Clara County and California. In the Bay Area, the unemployment rate dropped from 8.7 percent in February 2012 to 7.2 percent in February 2013. The trajectory of declining unemployment rates is promising for a rapidly improving local labor market. The unemployment rate in Santa Clara County also experienced a large decline: dropping from 8.8 percent in February 2012 to 7.4 percent in February 2013. In both cases, the local labor market experienced drops of roughly one and a half percentage points over the past 12 months, which represents a substantial improvement in labor market conditions. Throughout the past 14 months the unemployment rate in the Bay Area and Santa Clara County were lower than rates in California as a whole.



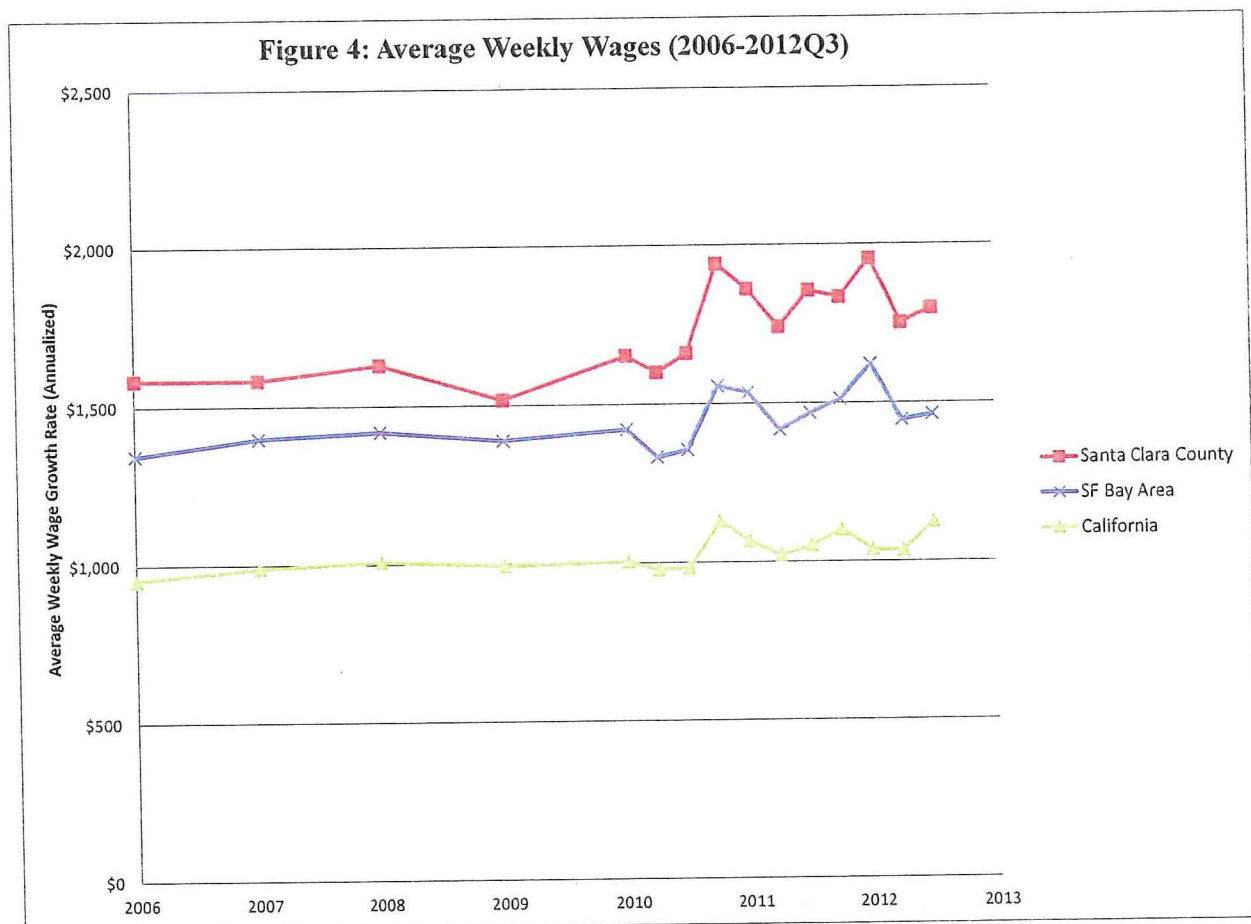
Another measure of labor market conditions is the employment growth rate. Figure 3 displays employment growth rates for the Bay Area, Santa Clara County and California. The employment growth rate is not affected by individuals who move into and out of the labor force as is the unemployment rate measure. Although employment growth rates in the San Francisco Bay Area were negative in the Great Recession they returned to positive territory in 2011 and 2012. Employment grew in the Bay Area by 2.7 percent from 2010 to 2011 and 3.3 percent from 2011 to 2012. Santa Clara County also experienced positive levels of employment growth in 2011 and 2012, and had even higher levels of growth. Employment grew by 4.2 percent from 2010 to 2011 and 3.8 percent from 2011 to 2012.



Wages are extremely high in the San Francisco Bay Area and Santa Clara County compared to the rest of California and the country. Figure 4 displays average weekly wages. The average weekly wages are \$1,464 for the Bay Area and \$1,800 for Santa Clara County.⁵ These average wages are substantially higher than the California total (\$1,125) and the U.S. total (\$906).

Santa Clara County is the highest ranked county in wage levels out of the 328 largest counties in the United States. Average wages in Santa Clara County are 11 percent higher than the second highest ranked county, New York, at \$1,626. Other Bay Area counties also have very high wage rates – San Mateo County is ranked 3rd at \$1,537 and San Francisco County is ranked 6th at \$1,473. Wages in Santa Clara County are roughly 20 percent higher than the 4th and 5th ranked counties of Washington, D.C. and Arlington.

⁵ Estimates are from the U.S. Bureau of Labor Statistics (2013), http://www.bls.gov/schedule/archives/cewqtr_nr.htm.



Although average wages in the Bay Area declined during the recession they have rebounded and are growing rapidly again. Wages have grown considerably over the past two years and are now well above pre-recessionary levels.

Projections by the California Department of Finance are for continuing improvements in the labor market in California.⁶ The unemployment rate is projected to decline to 9.6 percent in 2013, 8.7 percent in 2014, and 7.7 percent in 2015. The California Department of Finance projects employment in California will grow by 1.8 percent in 2013, 2.0 percent in 2014, and 2.2 percent in 2015. Finally, average wages in California are projected to grow by 2.4 percent in 2013, 3.3 percent in 2014, and 3.6 percent in 2015.

The California Legislative Analyst's Office (LAO) also projects improvement in the labor market over the next few years.⁷ The unemployment rate in California is projected to decline to 9.6 percent in 2013 and 8.7 percent in 2014. Wage and salary employment is projected to grow by 2.1 percent in 2013 and 2.4 percent in 2014.

⁶ Forecasts were prepared by the California Department of Finance in November 2012, http://www.dof.ca.gov/HTML/FS_DATA/LatestEconData/FS_Forecasts.htm.

⁷ Forecasts were prepared by the California Legislative Analyst's Office in January 2013, <http://www.lao.ca.gov/reports/2013/bud/budget-overview/budget-overview-011413.pdf>.

The UCLA Anderson Forecast also projects continuing improvements in the California labor market.⁸ Total employment in California is projected to grow by 1.6 percent in 2013, 2.2 percent in 2014, and 2.3 percent in 2015. The unemployment rate in California is predicted to steadily decrease over the next two years. The forecast projects that the unemployment rate will drop to 9.6 percent in 2013, 8.4 percent in 2014, and 7.2 percent in 2015.

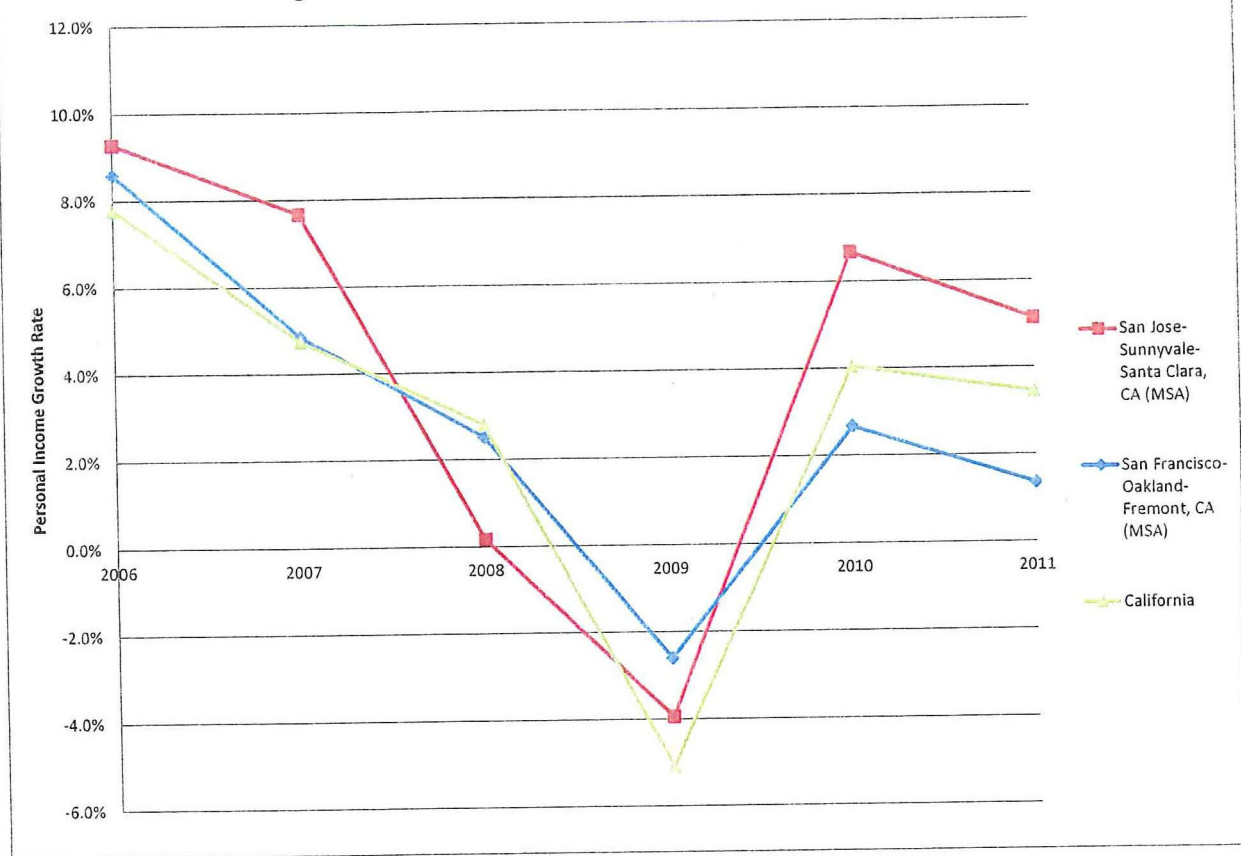
Three main conclusions can be drawn from this analysis of labor market conditions in the Bay Area and Santa Clara County. First, unemployment rates have dropped recently and employment growth has been strong. Second, recent trends in unemployment rates and employment growth suggest continuing improvement in the Bay Area and Santa Clara County labor markets, which is supported by three separate forecasts of the California labor market over the next few years. All three forecasts predict future improvement in labor market conditions in California. Finally, average wages are high in the Bay Area and especially Santa Clara County and have grown rapidly recently. Wages are forecasted to grow strongly over the next several years in California.

Personal Income

The growth rate in total personal income is a commonly used measure of economic conditions. Personal income as measured by the U.S. Bureau of Economic Analysis captures the income received by all persons from all sources, and is the sum of net earnings by place of residence, property income, and personal current transfer receipts. The personal income growth rate is displayed in Figure 5 for the Santa Jose-Sunnyvale-Santa Clara MSA over the past several years. Although personal income declined in 2009, it grew by a striking 6.7 percent in 2010 and 5.1 percent in 2011 corresponding with the recovery from the recession. Total personal income in the Santa Jose-Sunnyvale-Santa Clara MSA grew from \$ 101 billion in 2009 to \$114 billion in 2011 (12.2 percent growth rate). Personal income in the San Francisco-Oakland-Fremont MSA and California as a whole followed a similar trend of returning to positive growth in 2010 and 2011.

⁸ Forecasts were prepared by the UCLA Anderson Forecast in March 2013, http://uclaforecast.com/contents/archive/2013/media_31313_1.asp.

Figure 5: Personal Income Growth Rate (2006-2011)



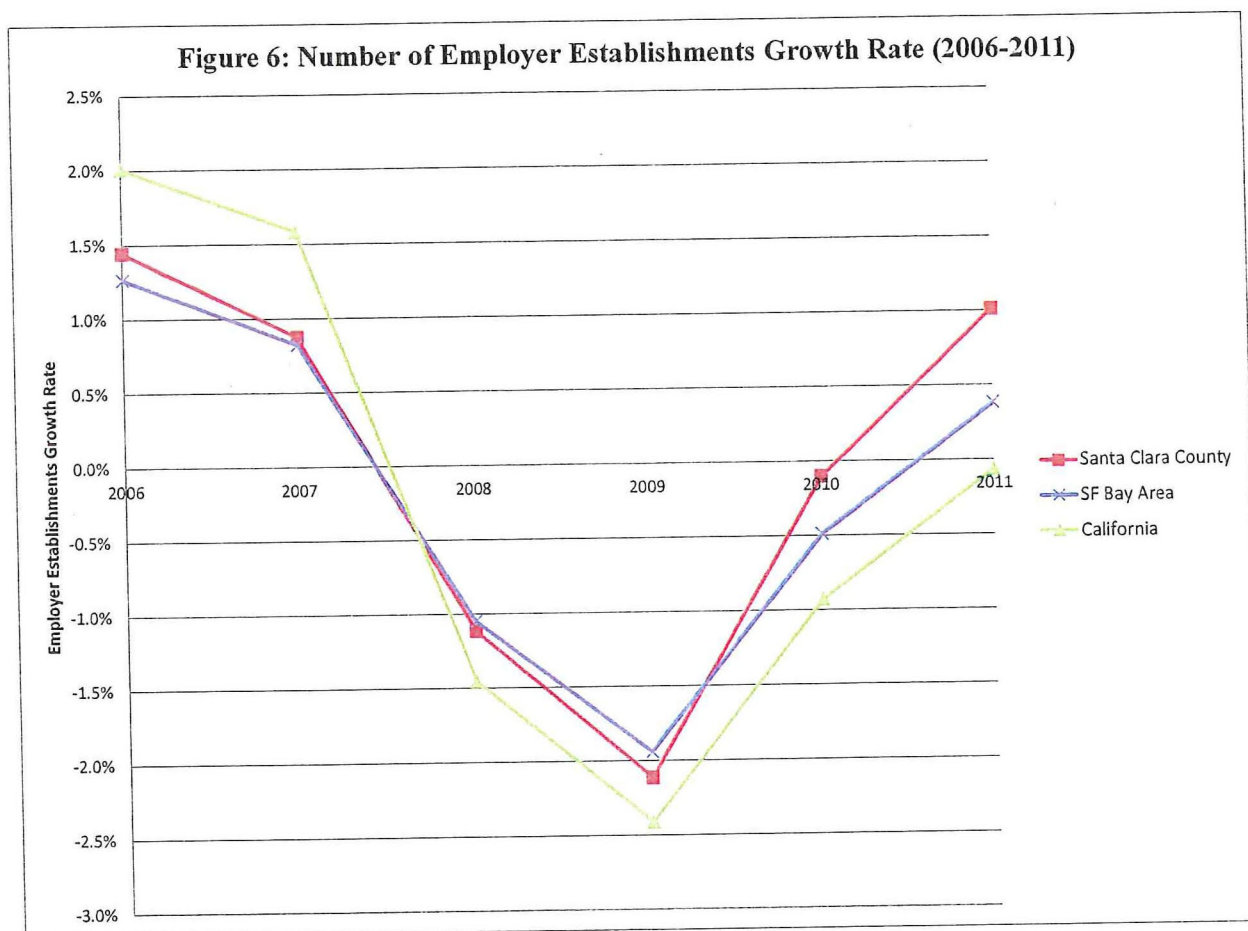
The California Department of Finance projects that total personal income in California will increase substantially over the next few years. Personal income is projected to increase 4.3 percent in 2013, 5.5 percent in 2014, and 5.3 percent in 2015. The California LAO projects personal income to grow by 4.3 percent in 2013 and 5.5 percent in 2014.

Business Growth

The business climate in a local economy is another gauge of how well the local economy is doing. Figure 6 displays the growth rate in employer establishments in the Bay Area over the past few years.⁹ Businesses that hire employees are more successful than non-employer businesses and tend to follow the business cycle more closely. The employer establishment growth rate was negative in the recession. The growth rate, however, stopped declining and reversed its downward trend and turned positive in Santa Clara County and the Bay Area in 2011. The growth rate for 2011 in Santa Clara County was in the range of pre-recessionary levels. The growth rate was close to zero in California in 2011, but the reversal of trends and upward trajectory in growth rates suggests improvement.

⁹ Estimates are from the U.S. Census Bureau (2013), <http://www.census.gov/econ/cbp/index.html>.

. The reversal of downward trends in business growth rates was similar for Santa Clara County and California as a whole. The latest data are available through only 2010, but the reversal of trends suggests that the growth rate might have been positive in 2011.

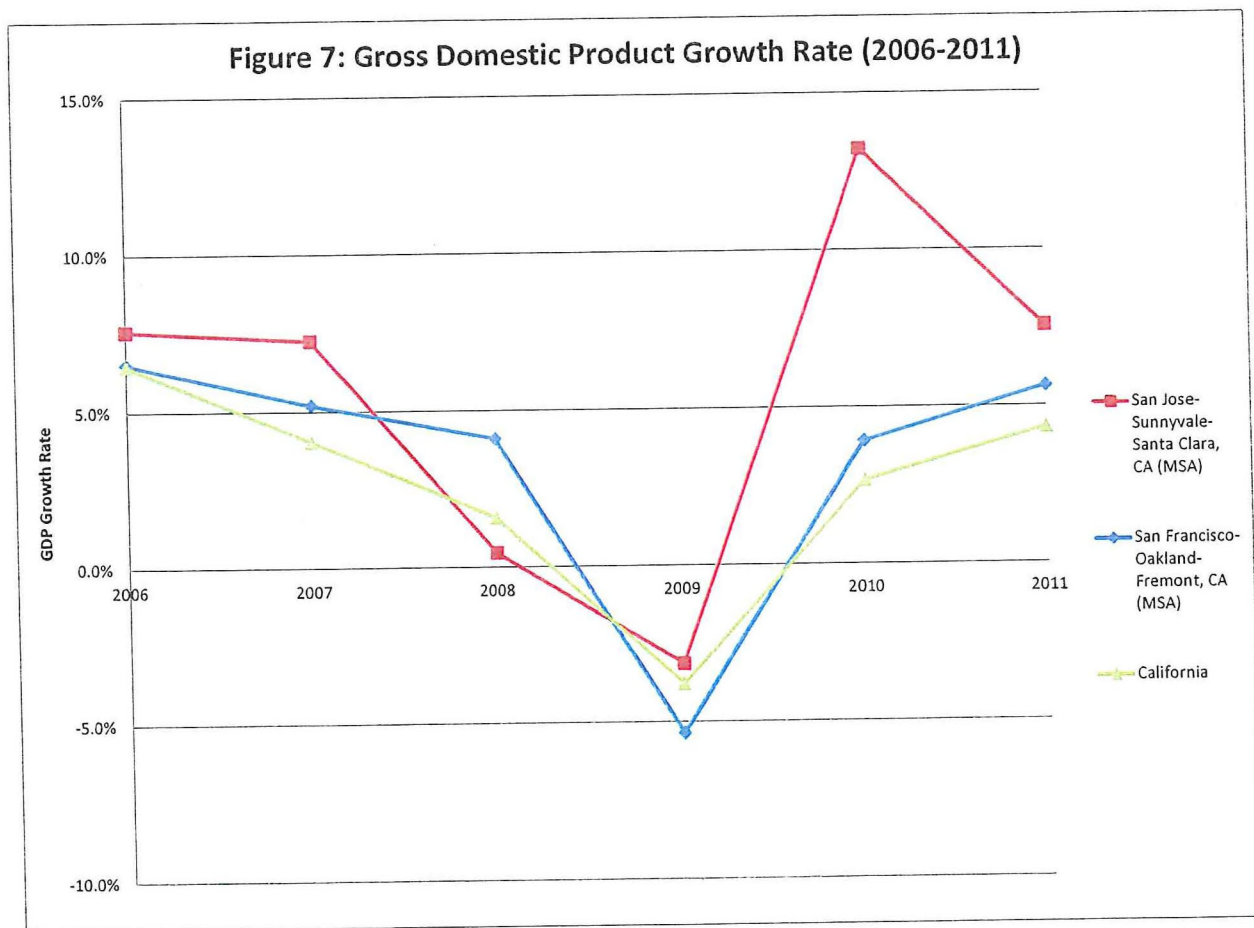


Office vacancy rates in the Bay Area are low and declining rapidly. The office vacancy rate in the San Jose-Silicon Valley Area is 13.1 percent in 2013Q1. The U.S. rate is 15.4 percent. The current office vacancy rate in San Jose-Silicon Valley declined from 18.5 percent in 2010 and 15.4 percent in 2011. The office vacancy rate is very low in San Francisco at 8.7 percent, declining from 15.6 percent in 2010 and 12.4 percent in 2011.¹⁰ Asking rents for office space are also high in San Jose-Silicon Valley (\$29.21 compared to \$21.64 in the U.S.) and increased from \$25.19 in 2010 and \$25.59 in 2011. Asking rents were even higher in San Francisco at \$45.56 increasing from \$32.04 in 2010 and \$35.75 in 2011. These patterns reflect improving business conditions in the Bay Area.

Gross Domestic Product

¹⁰ Estimates are from Cassidy Turley, <http://cassidyturley.com/> in U.S. Office Trends Report – 1st Quarter 2013.

The growth rate in Gross Domestic Product (GDP) captures the combination of the worker, consumer and business sides of the local economy. GDP is defined as the output of goods and services produced by labor and property located in the regional area and is considered a broad measure of economic activity. Figure 7 displays GDP growth rates for the San Jose-Sunnyvale-Santa Clara MSA. GDP in the San Jose-Sunnyvale-Santa Clara MSA was \$177 billion in 2011.¹¹ GDP dropped from 2008 to 2009 as the region suffered through the Great Recession, but rebounded in 2010. In 2010, not only did GDP grow again, but it also halted and reversed an increasingly negative trend over the past few years. From 2009 to 2010 GDP in the San Jose-Sunnyvale-Santa Clara MSA grew by an impressive 13.2 percent. From 2010 to 2011 it grew by another remarkable 7.6 percent. These growth rates are either higher or similar to those in 2006 and 2007 prior to the recession when the economy was growing rapidly. GDP also grew rapidly in the San Francisco-Oakland-Fremont MSA at 3.9 percent in 2010 and 5.7 percent in 2011. In California as a whole, GDP grew by 2.7 percent in 2010 and 4.3 percent in 2011.



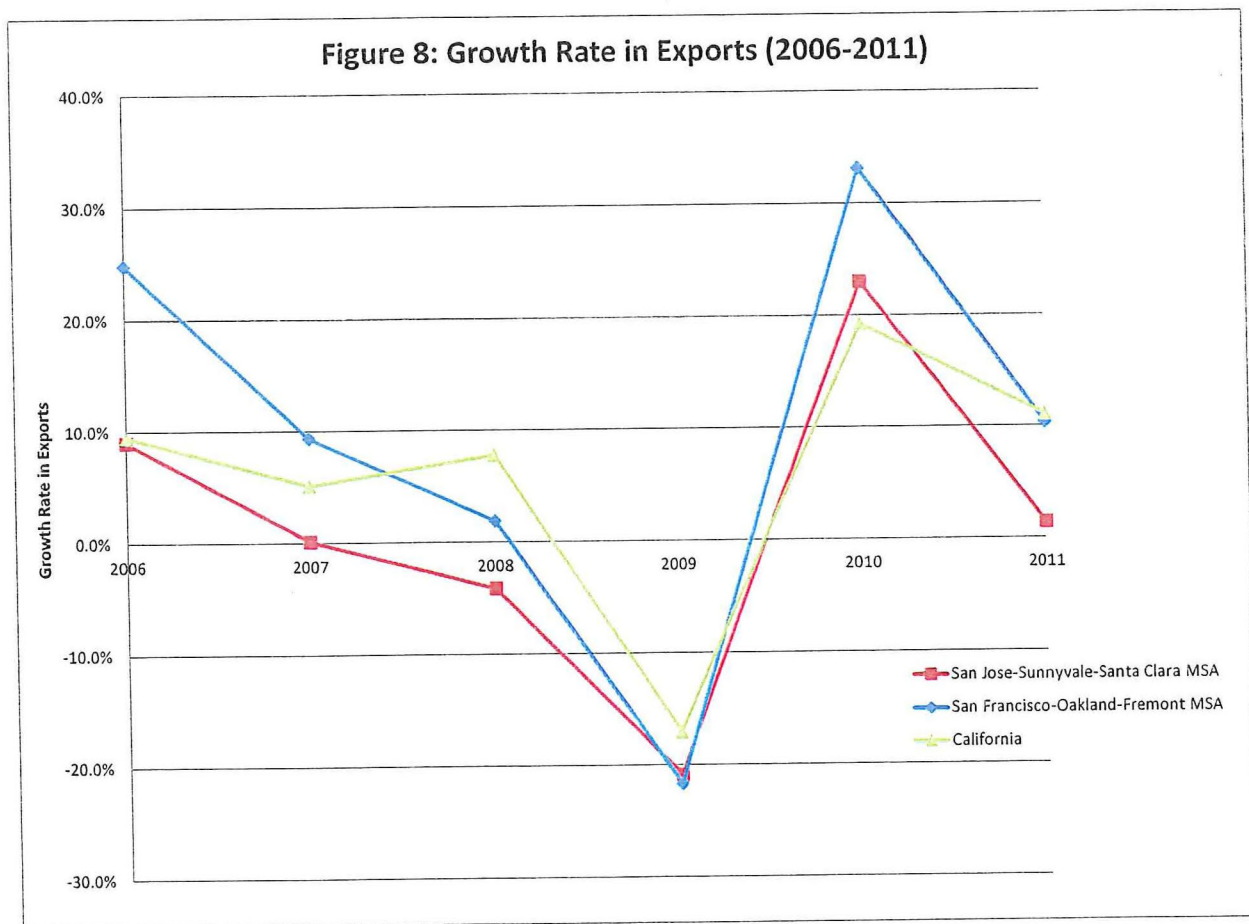
The California Department of Finance predicts real GDP to grow over the next three years. The forecast is for growth of 1.8 percent in 2013, 2.8 percent in 2014, and 3.4 percent in 2015. The

¹¹ Estimates are from the U.S. Bureau of Economic Analysis (2013), http://www.bea.gov/iTable/index_regional.cfm.

California LAO projects real GDP growth in the United States to be 1.8 percent in 2013 and 2.8 percent in 2014. Note that projections for actual GDP growth rate would be even higher because these projections for real GDP adjust downward for inflation.

Exports

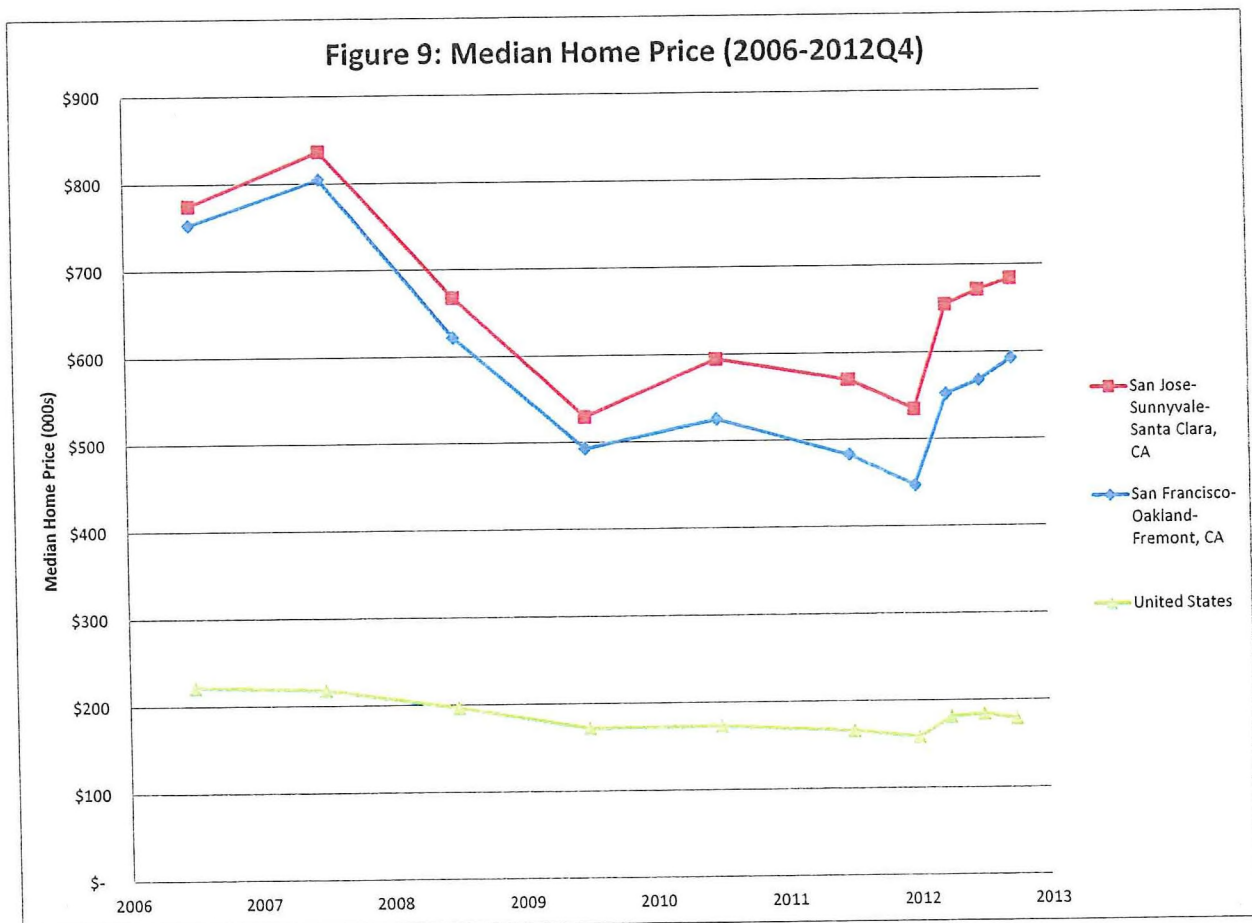
Another measure of economic conditions is exports. Exports from U.S. firms expand markets for goods and services outside of local and national markets, and represent a barometer of how global conditions affect U.S. businesses and employment. Figure 8 reports growth rates in exports.¹² Exports from the San Jose-Sunnyvale-Santa Clara MSA were \$26.7 billion in 2011. Growth rates in exports were negative in the recession, but were positive in the past two years. Exports also grew over the past two years in California and in the San Francisco-Oakland-Fremont MSA.



Housing Conditions

¹² Estimates are from the International Trade Administration, Department of Commerce (2013), <http://tse.export.gov/METRO/SelectReports.aspx?DATA=Metro>

The rapid decline in housing prices resulting from the housing crisis that preceded the Great Recession has flattened out and even reversed itself. Figure 9 displays median home prices in the San Jose-Sunnyvale-Santa Clara MSA.¹³ The median home price increased from \$530,000 in 2009 to \$685,000 in the last quarter of 2012 (an increase of 29 percent). Even from 2011 when house prices were \$570,000, this is a large increase of 20 percent. House prices in the San Francisco-Oakland-Fremont MSA also increased substantially over the past couple of years, from \$493,000 in 2009 to \$593,000 in 2012Q4 (an increase of 20 percent). This upturn in housing prices over the past couple of years, which is also apparent for the nation, suggests that the bottom of the housing market has been reached and housing prices are starting to appreciate again.

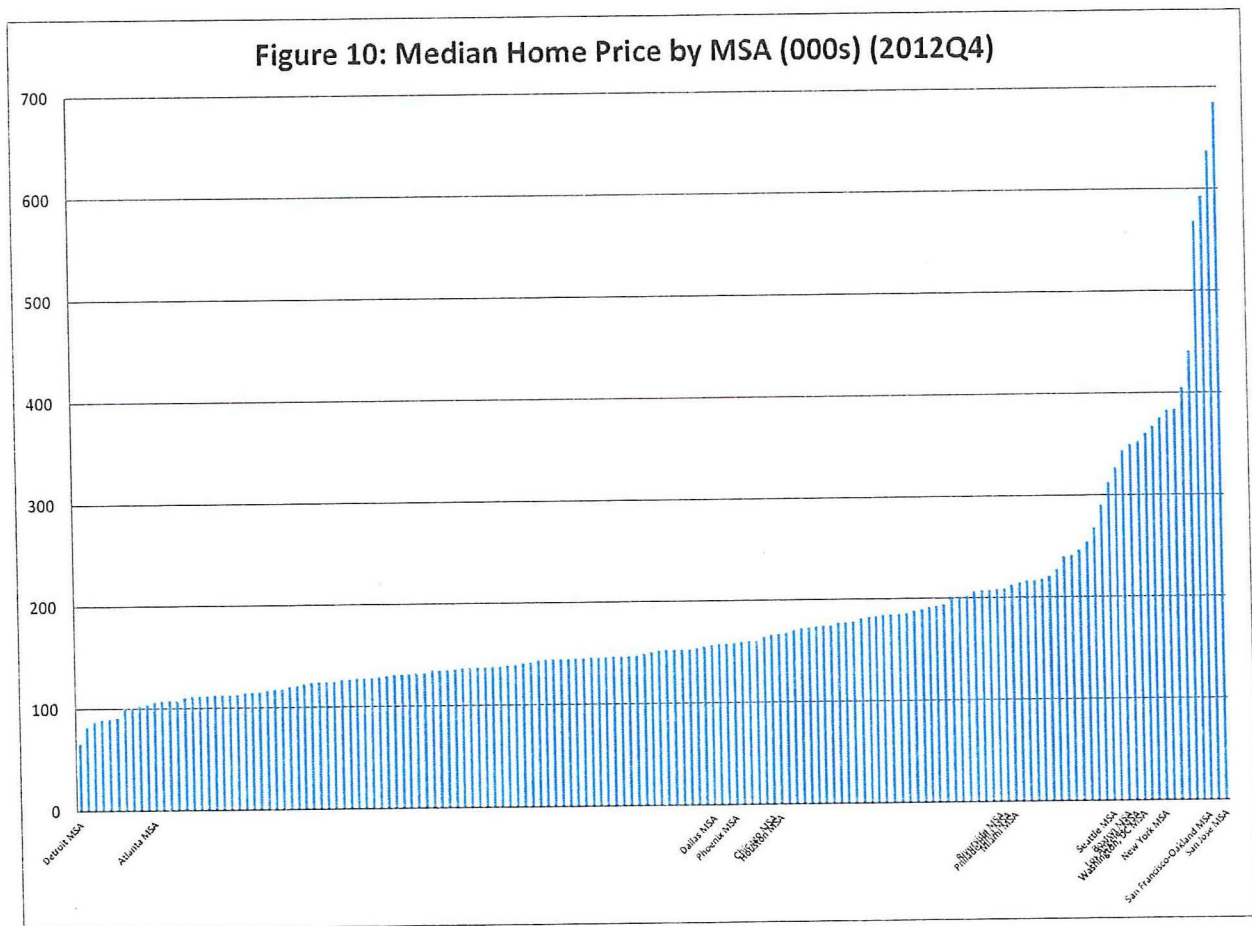


The Fiserv Case-Shiller home price index predicts that the San Jose-Sunnyvale-Santa Clara MSA housing market will increase slightly by 0.7 percent from 2012Q3 to 2013Q3 and increase by 2.5 percent from 2013Q3 to 2014Q3. Forecasts for the San Francisco-San Mateo-Redwood City Metropolitan Division are for growth rates of 3.4 percent over 2013 and 6.3 percent over 2014.

¹³ Estimates are from the National Association of Realtors (2013), <http://www.realtor.org/research/research/metropriprice>

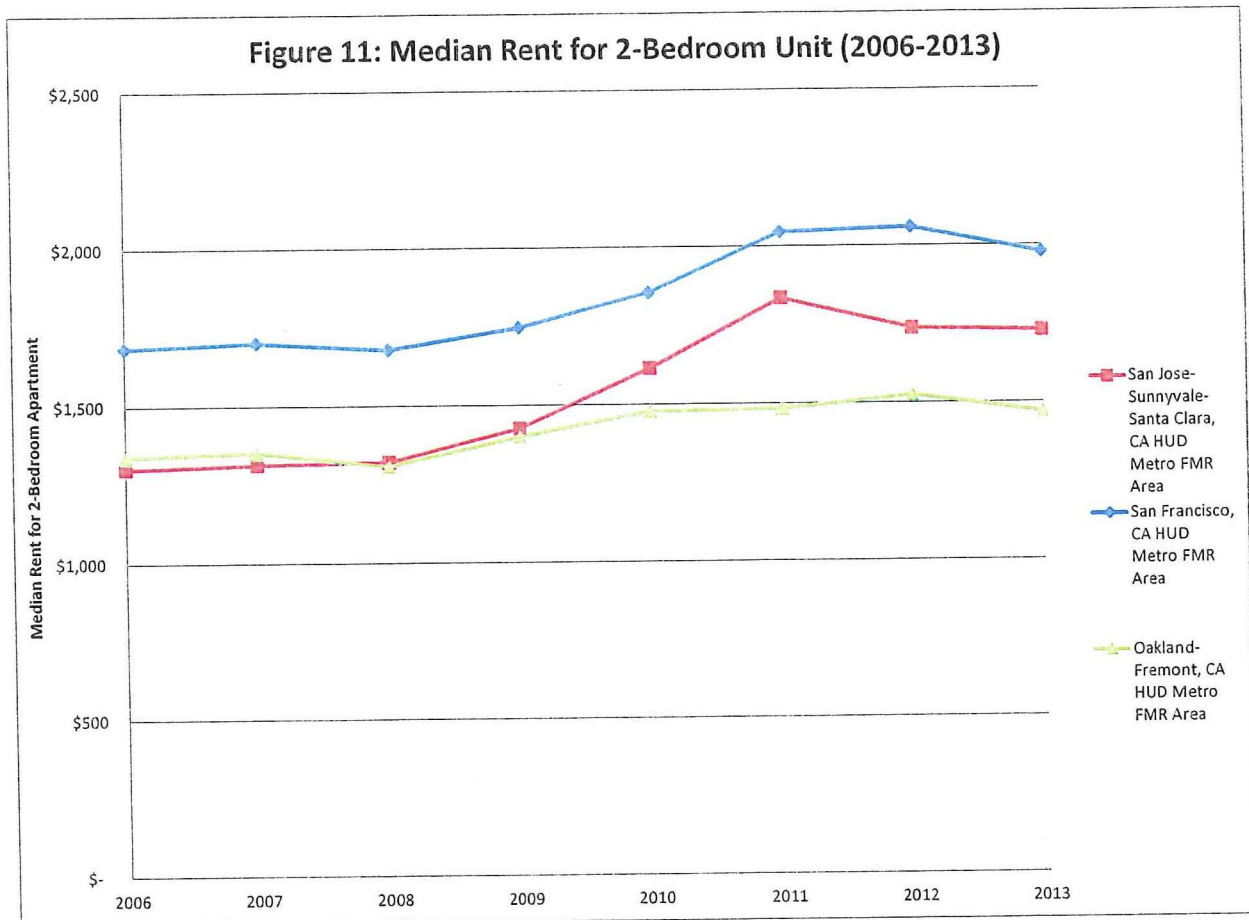
Housing prices in Bay Area remain below their peak in 2007, but the recent trend suggests considerable improvement.

House prices in the Bay Area remain extremely high relative to the rest of the country. The median home price in the San Jose-Sunnyvale-Santa Clara MSA of \$685,000 is nearly four times higher than the national median of \$179,000. The San Jose-Sunnyvale-Santa Clara MSA has the highest ranked median home price out of the 149 metropolitan areas in the country. Figure 10 displays median home prices in 2012Q4 for the San Jose-Sunnyvale-Santa Clara MSA and the 148 other metropolitan areas listed in the data. Only names of the San Jose, San Francisco-Oakland-Fremont MSA, and the other 14 largest MSAs are reported in the figure to make it easier to read. After the San Jose MSA, the second highest median home price is for the Honolulu MSA and the third highest is for the San Francisco-Oakland-Fremont MSA. The figure makes it clear how much higher home prices are in the Bay Area relative to other metropolitan areas in the country.



Renting an apartment or house in the Bay Area is also extremely expensive. Figure 11 displays median rental prices for 2-bedroom units in all three major geographical areas that make up the San Francisco Bay Area – San Francisco, San Jose-Sunnyvale-Santa Clara, and Oakland-

Fremont.¹⁴ The median rental price for a 2-bedroom unit is \$1,730 for San Jose, \$1,979 for San Francisco, and \$1,469 for Oakland. Rental prices have also increased since the end of the recession suggesting that there might be further increases. These high rental rates are consistent with high home prices and provide further evidence of the high cost of living throughout the San Francisco Bay Area.

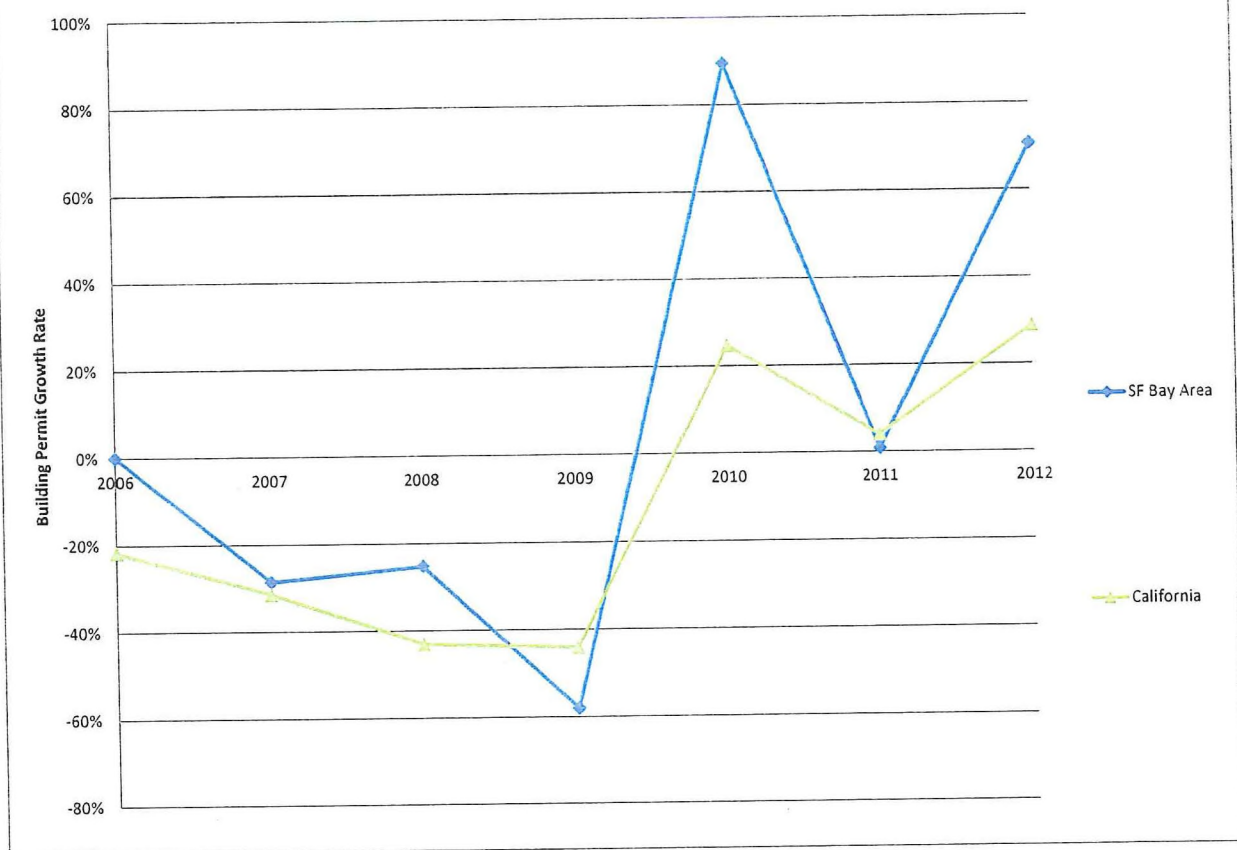


The number of building permits rose in the San Francisco Bay Area in the past few years. Figure 12 displays trends in new housing building permit growth rates for the San Francisco Bay Area and California.¹⁵ After declining each year from 2006 through 2009, the building permit growth rate became positive in 2010, was close to zero in 2011, but then became positive again in 2012. From 2010 to 2012, building permits grew extremely rapidly at 72 percent in the Bay Area. The growth rate in building permits in California was also extremely high at 34 percent from 2010 to 2012.

¹⁴ Estimates are from the U.S. Department of Housing and Urban Development (2013), <http://www.huduser.org/portal/datasets/50per.html>.

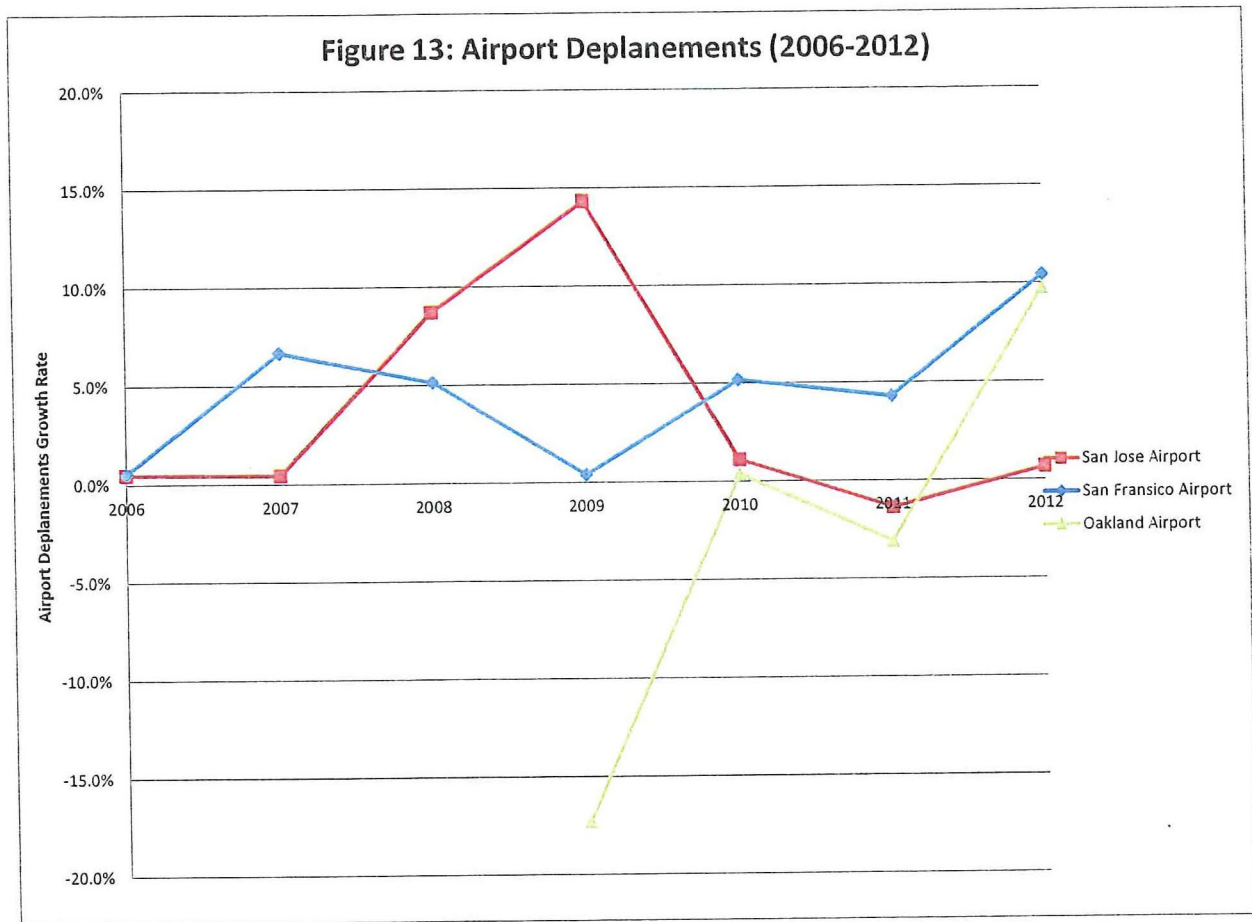
¹⁵ Estimates are from the U.S. Census Bureau (2013), <http://www.census.gov/construction/bps/>.

Figure 12: New Housing Building Permit Growth Rates (2006-2012)



Tourist Activity

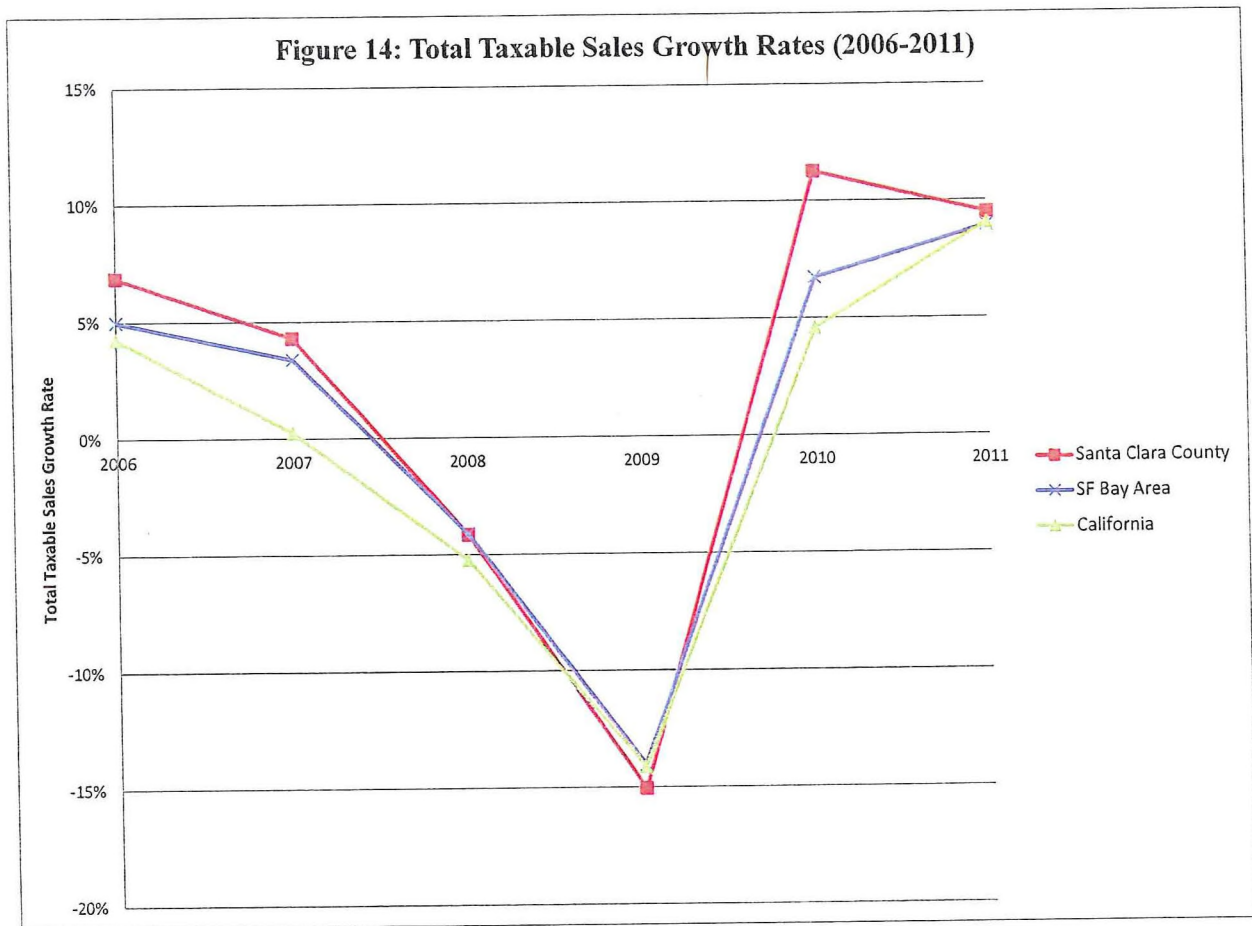
Tourist activity is important for the San Francisco Bay Area local economy. Airport activity is used to proxy for tourist activity and potential expenditures in the Bay Area. Figure 13 displays the total number of deplanements at the three major airports in the San Francisco Bay Area – the San Francisco Airport (SFO), San Jose Airport (SJC), and Oakland Airport (OAK) – for the past several years. Although many of these airline travelers are returning home or travelling for business, it represents a proxy for tourist travel to the Bay Area. At all three airports, the number of deplanements increased from 2011 to 2012. Deplanements grew by 10.4 percent at SFO, 0.7 percent at SJC, and 9.8 percent at OAK. If these upward trends continue it bodes well for tourism in the Bay Area over the next several years.



Taxable Sales

The recession had a notable effect on total taxable sales in the Bay Area. Figure 14 displays taxable sales in the Bay Area for the past several years. Taxable sales declined by 14 percent from 2008 to 2009 in the Bay Area and by 15 percent in Santa Clara County.¹⁶ But, 2010 started a major rebound in total taxable sales for Bay Area as the economy recovered and grew. Taxable sales grew by 7 percent from 2009 to 2010 and another 9 percent from 2010 to 2011. Taxable sales growth was even higher in Santa Clara County growing by 11 percent from 2009 to 2010 and 10 percent from 2010 to 2011. The growth rate in taxable sales was slightly lower for California.

¹⁶ Estimates are from the California State Board of Equalization (2013), <http://www.boe.ca.gov/news/tsalescont.htm>.



Inflation

Inflation has returned to pre-recession levels in the Bay Area and the nation as a whole. Figure 15 displays the Consumer Price Index (CPI) for the San Francisco-Oakland-San Jose region and the United States.¹⁷ The CPI is annualized for the year prior to the reported month. The CPI dropped precipitously in the recession and even became negative for the United States. But, for both the Bay Area and the United States, the CPI has returned to positive levels. The latest estimates indicate that the annualized CPI is 2.4 percent in the Bay Area and 2.0 percent in the United States. Over the past two years the average annual CPI was 2.7 percent for the Bay Area and 2.6 percent for the United States.

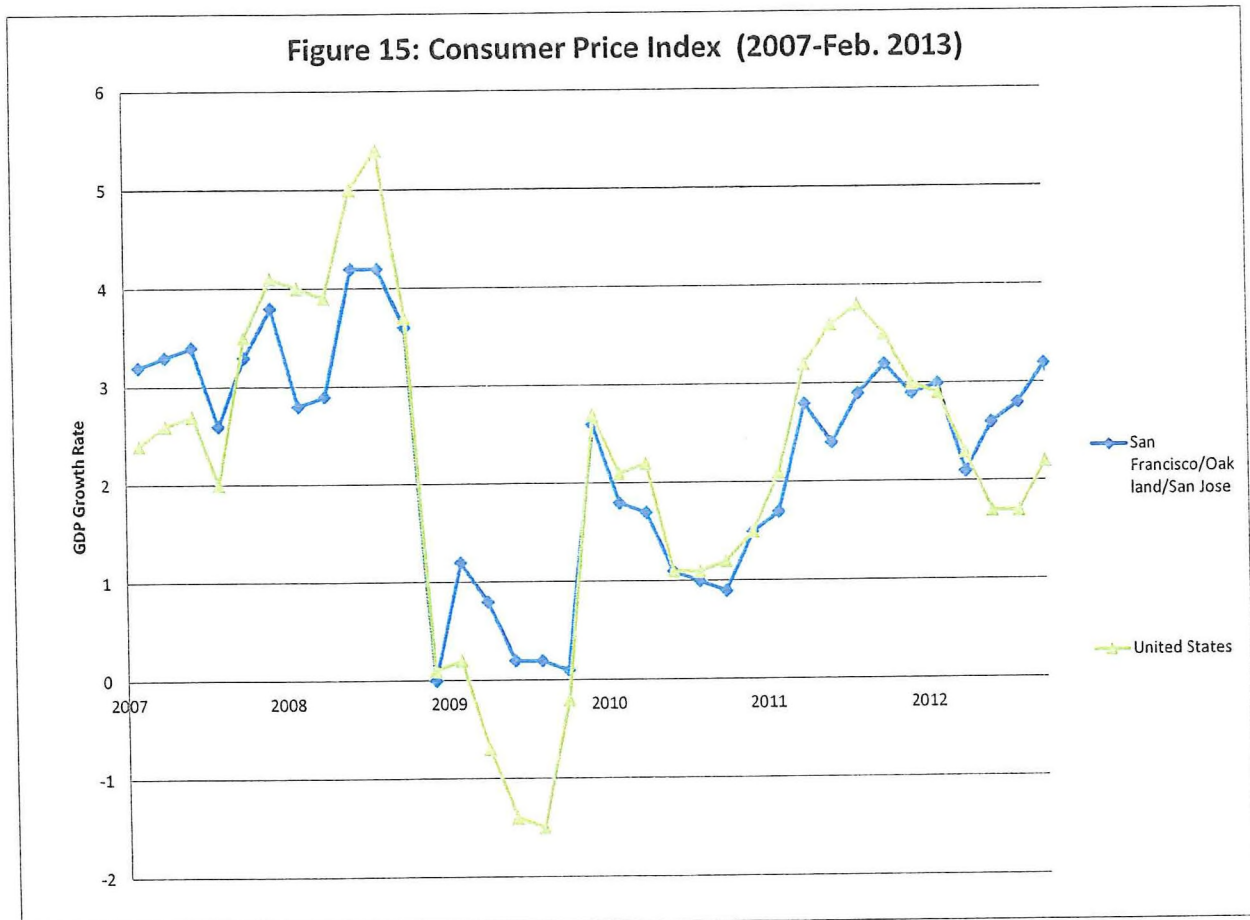
Forecasts for inflation in San Francisco call for levels of the CPI in the 2.0 to 2.2 range over the next few years. The San Francisco Controller's Office of Economic Analysis projects the CPI to be 2.2% for FY 2013-14, 2.2% for FY 2014-15 and 2.1% for FY 2015-16.¹⁸ The California

¹⁷ Estimates are from the U.S. Bureau of Labor Statistics (2013), <http://www.bls.gov/regions/cpi.asp>.

¹⁸ See Joint Report by the San Francisco Controller's Office, Mayor's Office, and Board of Supervisors' Budget and Legislative Analyst, <http://www.sfcontroller.org/modules/showdocument.aspx?documentid=2961>.

Department of Finance projects that the CPI for San Francisco will be 2.0 percent in 2013, 2.2 percent in 2014, 2.2 percent in 2015, and 2.1 percent in 2016.

The California Department of Finance projects that the CPI will be 2.0 percent in 2013, 2.1 percent in 2014, 2.2 percent in 2015, and 2.3 percent in 2016 for California. For the United States, the California Department of Finance projects that the CPI will be 1.9 percent in 2013, 2.0 percent in 2014, 2.0 percent in 2015, and 2.1 percent in 2016. The California LAO projects the CPI in the United States to be 1.9 percent in 2013 and 2.0 percent in 2014.



Summary

The analysis of local economic conditions over the past few years clearly indicates that the Bay Area economy is recovering from the recession and growing. Recent trends indicate substantial improvement in the local economy and all forecasts for California project improvements over the next few years. The improvements are found in all aspects of the local economy studied. The labor market, GDP, personal income, exports, home prices, rents, building permits, airport activity, and total taxable sales all grew recently in the Bay Area.